

corporation is an example of the rewards of initiative, ambition, perseverance, and hard work. It has always been a part of the American belief, and consequent appeal to immigrants, that a person possessing these characteristics, among others, could, in a free enterprise system, grow and prosper. It was beliefs, such as the above, as well as the freedom to exercise an individual's beliefs that brought humble, poor, hard-working immigrants like the Edward Honeggers to this country. Thus it was that the present day Honegger corporation grew from a combination of immigrant desires for freedom and economic advancement, a farmer's desire to improve his farm production, and a belief in the American free enterprise system.

Several other and more tangible factors account for the successful establishment of the Honegger corporation. One of the first of these factors is the condition that prevailed during and immediately after the Second World War in this country. Several factors worked in concert to enable the Company to be established on a firm and solid basis: (1) the wartime demand for animal products meant a high demand for feed to raise these animals, (2) the grain-deficit area of the East Coast region of the United States offered an unlimited market potential and consequent profits for the efficient company, and (3) substantial savings financially as a result of the railroad policy of "milling in transit."

Another factor in the establishment of Honeggers' & Co., Inc. was two actions taken by the management of the Company. Both actions resulted in the influx of substantial amounts of operating capital. One action was the decision to operate as a public corporation, taken in

the latter part of 1956. The other action was the securing in the late 1950's of two long term loans.

Several other factors relating to the operation of the Honegger enterprises seem of particular significance to this author. These factors can be divided into two categories, namely, those factors that reflect credit upon the Company management personnel and have been profitable to the Company or otherwise advantageous to the Company and which shall be considered as "positive factors." The other category are those factors which do not necessarily reflect credit upon the management personnel and have been unprofitable or otherwise detrimental to the operation of Honeggers' which shall be considered as "negative" factors.

On the positive side, first, the company has been, in varying degrees, professionally managed since 1942. Second, the Company management has always been progressive in viewpoint, that is to say, management has always been willing to accept another point of view, to carry out research in order to meet competition, to maintain modern milling and distribution facilities, and to attempt to anticipate trends in the formula feed industry in order to "keep up." This progressive attitude is evident in the fact that Honeggers' were among the leaders to introduce the use of 50-pound, paper feed bags and in the fact that the Fairbury Honegger mill, built in 1950, was then one of the most modern in existence.

Third, Honeggers' & Co., Inc. has continually sought to provide as complete a service as possible to the agrarian interests they serve.

Fourth, Management at Honeggers' has continued to up-date and modernize mill equipment to maintain efficiency. Two new pellet mills were installed in the Fairbury mill in November of 1968, representing an investment of more than 45,000 dollars.²

On the negative side, several factors relating to the Honegger operation are also evident. First, management of the Company, although professional except for interim periods, has not always been the best. For example, during the 1950's at various periods, well intentioned but overly ambitious and poorly carried out expansions coupled with loans of high risk potential led to eventual severe financial reverses in the early 1960's. Related to this factor is the fact that during such expansion operations, the Board of Directors and managers did not always have the unity of purpose that such plans demanded. As a result, uncollectable loans had to be written off as losses and overextension of operations led to eventual selling off of company sidelines.

Second, Sam Honegger, most active of the two founding brothers in company operations, never did and still does not like operating a large business concern.³ This attitude sometimes, unconsciously and unintentionally, led to conflicts in the conduct of business.

Third, there is and has been for some time a definite tendency in the formula feed industry for vertical integration, a development which Honeggers' & Co., Inc. has elected not to pursue, at least in the current

² "Honeggers' Installing New Pellet Mills," The Fairbury Blade, cols. 1-5, p. 1 (November 14, 1968).

³ Interview with Sam R. Honegger, Chairman of the Board of Directors, Honeggers' & Co., Inc., December 10, 1968.

form of the trend. What Honeggers has done in the past can not be considered lateral instead. Whether or not Honeggers' should undertake vertical integration as it is now practiced in the formula feed industry is a managerial decision. What the author considers negative in relation to this factor is that what expansion has taken place sometimes resulted in large losses for the Company.

Finally, employee morale at various periods has been at low ebb and has resulted in inefficiency and waste. This low morale is traceable directly to the periods of profitability of the Company. As Honegger profits improved, so did and does the morale.

Still other factors appear significant to the author in the analysis of the data of this thesis. Honeggers' & Co., Inc. Have had to change and otherwise alter policies and practice to conform to changes within the formula feed industry in the 40 years since the Company began operations. Honeggers', like other small corporations who tend to ship relatively small quantities of their product, have found truck transportation increasingly cheaper and more convenient than rail transportation. A second change still in the process in the industry and at Honeggers' is the increasing demand for bulk feed rather than bagged feed. During the 1960's, Honegger shipments of bulk feed have increased from 10 per cent of total shipments in the 1950's to 40 per cent.⁴

Another change to affect Honeggers' was the trend in the formula feed industry away from one large mill which supplied large areas of the country to many smaller mills located more closely to the area being served. This decentralization of feed mills was observed by E. F. Dickey

⁴Interview with Charles Sass, Production Controller, Honeggers' & Co., Inc., October 14, 1968.

during his tenure with the Company in the early 1950's. As a result, he instituted Honeggers' Associate Mill program, which has and is currently undergoing modifications.

80

A final factor significant in the Honegger operation is the tremendous increase in the past 10 years in the use of drugs and medications in formula mixed feeds. This increased use of drugs has, at Honeggers' as well as all other major producers of feed, resulted in the necessary acquisition of new equipment and the use of new methods of production to conform to state and Federal regulations.

Conclusions

It is the conclusion of this author that the management of Honeggers' & Co., Inc., has at all times had the best interests of the Company in mind when their decisions were made, regardless of the outcome of those decisions. Human beings make errors, even with the best of intentions, and the management personnel of Honeggers' are human. No business, past or present, has a perfect record of success. When errors were committed, judgmental errors or other, they were promptly admitted and steps were immediately taken to correct them, steps which for the most part, met with success. Honeggers', despite recent occasional fiscal years of financial loss, have remained a sound and solid corporation, financially or otherwise. Qualified men fill the executive positions who are competent, confident, and successful.

It is also the author's conclusion that the recent sale of the company will be a benefit to the Company. The Honegger interests in the past, although unintentionally and mostly unconsciously appear to

have, at times, interfered with the best interests of the business. Again .
let it be stated that corporations are made up of people, individual
people who are human, and humans are not perfect.

81

This author does not know what the new owners of the Honegger
business plan for that business in the future. However, at the risk of
being mistaken for a prophet of things to come, it is hoped that
Honeggers' & Co., Inc. remains in the formula feed manufacturing business,
regardless of what name the new owners may choose to continue business
operations. Conglomerates and monopolies' while they offer certain
administration advantages, can not, must not, be allowed to destroy the
free enterprise system. Animal agriculture needs these services. If
decentralization of the feed industry will provide these services
better and more efficiently than a few large manufacturers, then the
smaller, more numerous manufacturers who are profitable and efficient
must remain a permanent part of the business and agrarian world.

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88

APPENDIX A

FEED INDUSTRY CHRONOLOGY

This chronological account of the feed manufacturing industry is credited to Larry Wherry, The Golden Age of Scientific Feeding (Milwaukee: Business Press, 1947), pp., i, ii, iii, iv, vi, vii. The dates and data given were compiled from feed trade papers and questionnaires mailed by Wherry to leading manufacturers. No attempt was made to include all the firms that are manufacturing feed today as this would total several thousand names. However, among the firms listed are most of the older and better-known manufacturers. Unless otherwise specified, each firm manufactures a complete line of poultry and livestock feeds, and operates one or more mills.

The author includes this appendix because though the information was printed previously, the book, in which it was printed is now out of print. The actual facts are today extremely difficult to obtain. There has not been a scholarly, and complete history of the feed industry written since the efforts of Wherry in 1947, and that work was not a scholarly work. The author also feels that the information in this appendix puts the material of Chapter Two in better perspective than if the information had not been included.

- 1875 John W. Barwell of Leicester, England, brought a feed manufacturing business to America, locating in Chicago and Waukegan, Illinois. In 1914, the name of the firm was changed to Blatchford Calf Meal Company.
- 1885 National Food Company at Fon du Lac, Wisconsin, began manufacturing drugs and No-Milk Calf Food. In 1925, D. R. Mihills bought this group out, discontinued the drugs, and continued to manufacture feed.

- 1886 Albers Milling Company was founded by Bernard Albers at Seattle, Washington. Feed Manufacturing began in 1895. In 1929, this company merged with the Carnation Company, but Albers continued with a separate corporation and no change in brand names.
- 1891 The American Cereal Company, forerunner of the present Quaker Oats Company, was incorporated in Ohio, to include seven leading manufacturers of oatmeal. One of the manufacturers, Schumacher of Akron, Ohio, had also been mixing feeds for poultry and live-stock since the early 1800's.
- 1892 Valley City Milling Company, Portland, Michigan, began manufacturing horse feed.
- 1894 Robinson-Danforth Commission Company of St. Louis, Missouri, began making mixed feeds. In 1898 the name "Purina" was adopted, and Purina Mills became part of the new working corporation, Ralston Purina Company.
- 1895 John W. Eshelman, son of the founder of the Eshelman Company, moved to Lancaster, Pennsylvania, and established a feed store. The Eshelman firm began as a country grists-mill near Lancaster in 1842.
- 1898 South Texas Grain Company was chartered by Charles P. Shearn and J. V. Neuhausand brothers. The grain and feed part of the business was sold to South Texas Feed Company in 1936. The Company name was changed to Uncle Johnny Mills in 1943.
- 1898 Aubrey & Company of Louisville, Kentucky, began the manufacture of feeds.
- 1901 The Quaker Oats Company was founded as a holding company, after acquiring the larger part of the stock of the American Cereal Company. The Quaker Oats Company became an operating company in 1906.
- 1902 The Ubiko Milling Company was founded under the name of the J. W. Biles Company and became the Ubiko Milling Company in 1912.
- 1903 Charles M. Cox Company of Boston, Massachusetts, began manufacturing feed at St. Albans, Vermont.
- 1903 Edwards and Loomis Company began manufacturing feeds in Chicago. In 1916 the Company was incorporated as the Hales & Edwards Company. In 1920 the name was changed to Hales & Hunter Company.
- 1904 J. R. Mathews and John C. Reid founded the Corno Mills in East St. Louis, Illinois. The name was changed to National Oats Company in 1935.

91

- 1904 Northrup King Co., began manufacturing feeds at Minneapolis.
- 1904 Park and Pollard Co., Inc., was founded by Philip R. Park at Boston.
- 1905 The Early & Daniel Co., Cincinnati, Ohio, began to manufacture feeds.
- 1907 Dietrich & Gambril, Inc., of Frederick, Maryland, was founded.
- 1907 International Sugar Feed Company of Tennessee was founded.
- 1907 John W. Eshelman & Sons built their first feed-mixing plant at Lancaster, Pennsylvania.
- 1907 Tarkio Molasses Feed Company of Kansas City, Missouri, was founded.
- 1908 Tioga Mills, Inc. of Waverly, New York, founded under the original name of Tioga Mill and Elevator Company.
- 1908 The Crete Mills, founded by A. L. Johnson, began the manufacture of feeds at Crete, Nebraska.
- 1909 International Sugar Feed Company of Minneapolis was founded by M. W. Savage. This firm pioneered in the manufacture of molasses dairy feeds in the Middle West.
- 1910 D. H. Grandin Milling Company of Jamestown, New York, was founded.
- 1910 Elmore Milling Company, Inc., in New York was founded.
- 1910 Dailey Mills, Inc., Olean, New York, was founded.
- 1911 Dixie Mills Company of East St. Louis founded.
- 1912 Royal Feed and Milling Company organized at Jackson, Mississippi.
- 1912 Pratt Food Company organized at Philadelphia.
- 1912 The Sperry Flour Company of San Francisco began the manufacture and distribution of the West Coast Sperry Sureline Feeds.
- 1913 Brewley Mills, Fort Worth, Texas, began manufacturing mixed feeds.
- 1914 Spartan Grain & Mill Company, Spartanburg, South Carolina, was organized.
- 1915 Arcady Farms Milling Company, Chicago, was founded by Arthur Meeker.
- 1915 Acme Evans Company, Inc., Indianapolis, which was founded in 1821, began manufacturing feeds.

- 1915 H. K. Webster Company, Lawrence, Massachusetts, began manufacturing feeds. The firm was founded in 1868, by Henry K. Webster.
- 1916 Washburn Crosby Company, Minneapolis, acquired the North Star Feeds and began distribution of them in the Middle Western states.
- 1917 Superior Feed Mills, Oklahoma City, Oklahoma, founded in 1908, began manufacturing feeds.
- 1918 Sargent & Company, Des Moines, Iowa, which was founded by E. I. Sargent, Sr., 1888, began manufacturing feed.
- 1918 Doughboy Mills, Inc., New Richmond, Wisconsin, founded as New Richmond Roller Mills, Inc., in 1837, began to manufacture feeds.
- 1920 Nutrena Mills, Inc., Kansas City, Kansas, founded by Van Roy Miller.
- 1920 Ballard and Ballard Company, Louisville, Kentucky, was organized.
- 1920 The Beacon Milling Company, Inc., Cayuga, New York, founded.
- 1920 Pillsbury Flour Mills Co., Minneapolis, began manufacturing livestock and poultry feeds.
- 1920 Cosby-Hodges Milling Company began manufacturing feeds at Birmingham, Alabama.
- 1921 Whyte Feed Mills, Pine Bluff, Arkansas, founded.
- 1921 Universal Mills, Fort Worth, Texas, founded.
- 1923 Ful-O-Pep Research Farm established by the Quaker Oats Company at Libertyville, Illinois.
- 1924 Hermitage Feed Mills, Nashville, Tennessee, founded.
- 1925 Purina Experimental Farm established by Ralston Purina at Gray Summit, Missouri.
- 1928 General Mills, Inc., was organized, including the former Washburn Crosby Company, Red Star Milling Co., Royal Milling Company, Kalispell Flour Mills Company, and Rocky Mountain Elevator Company.
- 1928 Hubbard Milling Company, Mankato, Minnesota, began the manufacture of concentrate feeds.
- 1929 Allied Mills, Inc., was formed as a result of the merger of American Milling Company and the McMillen Company. The principal brand names of these predecessor companies, "Amco" and "Wayne" were continued.

- 1930 Feedright Milling Company, Atlanta, Georgia, founded.
- 1931 Atlanta Milling Company, Atlanta, Georgia, founded.
- 1932 Honeymead Products Company, Cedar Rapids, Iowa, founded.
- 1932 Acme Feed Mills, Inc., founded and operated out of Burlington, North Carolina.
- 1935 McMillen Feed Mills, Inc., a division of Central Soya Company, Inc., founded by D. W. McMillen.
- 1936 The Glidden Company of Cleveland, Ohio, began manufacturing feeds under the name of Holland Mills at Piqua, Ohio.
- 1938 Cargill, Inc., of Minneapolis, founded in 1865, began the manufacture of Feeds.

APPENDIX B

FEED FORMS BY COMMODITY

The author has included this appendix for the benefit of the reader who is not familiar with the many forms of feed that are mixed today for livestock rations. Grains and grain by-products are the basis of practically all complete feeds to which are added vitamins, minerals, drugs, and other ingredients according to the manufacturer's registered formula. What follows is a commodity by commodity description of the basic products and by-products as used in modern mixed rations for livestock and poultry. This information is found in Matz, Samuel A., The Chemistry and Technology of Cereals as Food and Feeds, Westport Connecticut: The AVI Publishing Co., Inc., 1959, pp. 415-420.

CORN

The oldest type of dry feed still fed is based on corn. It is what is known in the industry and to the farmer as Poultry "Scratch" and is made up of cracked corn, cracked wheat, cracked milo, steel-cut oat groats, and other ingredients. The most popular forms of corn and corn by-products as used in feed are:

1. Meal - Finely-ground, unbolted corn.
2. Cracked - which is also known as chop or ground, is ground, cut, or chopped kernels.
3. Screened Cracked - same as cracked but with the fine portions screened out.
4. Feed Meal - the fine portions referred to above.
5. Ground Ear - the entire ear except husk ground or cut.
6. Ground Ear including the husk.
7. Dehydrated Plant - a new product consisting of the entire mature plant artificially dried and ground.
8. Flaked - Used primarily as pet foods, it is the cracked product run over flaking rolls, then dried and cooled.
9. Toasted Flakes - Similar to the human breakfast food except they have no added sweetening or flavoring.
10. Kibbled - steam-cooked cracked product expelled or extruded.
11. Cobs - ground and including the ring cellulose.

12. Hominy Feed - mixture of bran, germ, and part of the tender starchy portion including not less than five per cent crude fat.
13. Bran - outer covering of the kernel with little or no germ or starch.
14. Germ Cake - germ from which part of the oil has been pressed, with no other parts of the kernel.
15. Germ Meal - the cake, ground.
16. Gluten Feed - residue of shelled product after most of the starch, gluten, and germ have been removed by wet milling.
17. Oil Cake - germ from which most of the oil has been removed by extraction.
18. Oil Meal - same as above, ground.
19. Sugar Molasses - often called hydrol, it contains 43 per cent or more dextrose.
20. Dried Syrup - spray or roll-dried regular conversion syrup with not less than 42 per cent dextrose.
21. Maltose Processed - dried residue of ground product after starch is removed in making malt.
22. Maltose Processed Gluten Feed - dried residue from degermed product after starch has been removed in making malt syrup.
23. Sweetened Gluten - gluten feed combined with molasses or cane molasses.
24. Distiller Dried Grains - dried portion of whole stillage retained by screens.
25. Distillers Dried Solubles - condensed and dried screen stillage.
26. Dried Grains and Solubles - a combination of above.

OATS

Oats have long been popular feeding materials. They supply an average of 12 per cent protein and $4\frac{1}{2}$ per cent fat, and 11 per cent fiber. The principal oat products used in feeds are:

1. Pulverized - ground on hammer mill using fine screen.
2. Ground - whole product ground fine or more coarsely on any type mill.
3. Crimped - whole product lightly crushed or crushed flat; when flattened, it is usually after they have been steamed to avoid an excess of fine materials.
4. Hulled - kernels produced from undried grain in the hulling process.
5. Groats - kernels produced from cleaned and dried product in making meal.
6. Meal - rolled groats or product containing not more than 4 per cent crude fiber.
7. Hulls -
8. Middlings - floury portion obtained in milling rolled product.

9. Shorts - covering of the grain which lies immediately inside the hull and is fuzzy in texture.
10. Mill by-Product - hulls and groat particles from groat manufacture.

RYE

Although little rye is used in mixed feeds, these products are sometimes included:

1. Bran - coarse outer covering of kernels.
2. Feed - mainly mill-run of the outer covering of the kernel and germ with small parts of flour and aleurone.
3. Red Dog - aleurone with small portions of flour and bran.
4. Low-Grade Feed Flour - flour and small quantities of bran and aleurone.
5. Middlings - feed and red dog combined.
6. Flour Middlings - feed, red dog, and flour combined.

LINSEED

Although linseed is not a cereal grain, it is included here because it is handled by the feed manufacturers as if it were a cereal grain. The residual meals from linseed oil extraction have long been used for cattle and swine feeding. The popular forms of linseed products are:

1. Oil Cake - product obtained by removing most of the oil from flaxseed by extraction; the type of process must be specified-hydraulic, expeller, or solvent.
2. Oil Meal - finely-ground cake or flakes.
3. Pellets.
4. Flaxseed Screenings Oil Feed - ground, imperfect, smaller flaxseed, weed seeds, and other foreign matter separated in cleaning flaxseed.
5. Feed - product consisting of one or more oil meals mixed with flaxseed screenings oil feed.
6. Flax Plant Product - leaves, corticle tissues, bolls, and broken and immature seeds which remain after harvesting seed and separating bast fibers and shives.

WHEAT

When wheat is cheaper than corn, on a pound for pound basis, it is ground and used in feeds of many kinds. Regular forms of this product are:

1. Bran - coarse outer covering of the kernel.
2. Middlings - fine particles of bran, germ, and flour plus some offal as milling by-products; maximum fibre 9.5 per cent.

3. Brown Shorts - similar to middlings but fiber maximum is 7.5 per cent.
4. Gray Shorts - similar to middlings but fiber maximum is 6 per cent.
5. Red Dog - offal plus some particles of bran, germ, and flour with fiber top of 4 per cent.
6. Feed Flour - flour with fine particles of bran, germ and offal; fiber limit is 1.5 per cent.
7. Mixed Feed - coarse outer covering of kernel plus offal and fine particles of bran, germ, and flour.
8. Germ Meal - mainly some bran and middlings or shorts.
9. Germ Oil Cake - Product resulting from removing oil germ meal.
10. Germ Oil Meal - Above, ground.
11. Flakes - product resulting from cooking, adding sugar and salt, and flaking and toasting whole product.

RICE

Rice milling by-products are used mainly in poultry feeds and some other rations. The popular forms are:

1. Meal - ground product with hull removed.
2. Ground Rough - includes the hull.
3. Bran - pericarp of product.
4. Huller Bran - mostly bran and germ.
5. Stone Bran - siftings from materials resulting from removal of hulls; includes germs, hulls, broken product.
6. Mill By-Product - offal or product milling.
7. Polishings - by-product of polishing kernels.

BARLEY

On the West Coast, in particular, barley is in ample supply and often is used as the basic grain in feeds. The most popular products are:

1. Ground Whole - entire product with no more than 6 per cent fiber or 10 per cent weed seeds or other grains.
2. Mixed Feed - offal from milling flour from clean grain.
3. Feed-By-Product of manufacture of pearl product from product.
4. Hulls - outer covering.
5. Dried Malt Sprouts - in widest use, they are a brewery by-product and contain 26 per cent protein.
6. Brewers Dried Grains - dried extracted residue of product malt, which may be mixed with other cereal grains or products resulting from wort manufacture.

GRAIN SORGHUMS

The sorghum grains, including, milo, kafir, and feterita, are gaining in importance every year as feed ingredients. In years past, there was little use of these products except in scratch feed. Now starch is being produced from sorghums and the resulting by-products are being fed. The popular forms of the sorghum feeds are:

1. Chop - entire product of the ground grain.
2. Head Chop - entire head, including grain and the stems.
3. Head Stems - stems with the grain removed.
4. Mill Feed - mixture of bran, germ, and part of the starchy portion of the grain.
5. Feed Meal - fine siftings from rolled or flaked processing of the product.
6. Rolled - whole product run over smooth flaking rolls and then cooled and dried.
7. Gluten Feed - remaining product after most of the starch and germ have been removed and the bran separated in wet milling.
8. Gluten Meal - remaining product after most of the starch and germ have been removed and the bran separated in wet milling.
9. Oil Cake - germ from which part of the oil has been pressed in wet milling.
10. Grits - flinty portions with little or no bran or germ.